

Author Index

- Adams, W. Robert: The Inhalation Toxicity of Oxygen Difluoride. November-December, p. 562
- Ajemian, Robert S.: Nickel Carbonyl: Its Detection and Potential for Formation. January-February, p. 72
- Ashford, J. R.: The Correlation of Dust Exposure with Progression of Radiological Pneumoconiosis in British Coal Miners. July-August, p. 347
- Barry, Patrick E.: A Dynamic Method for Mercury Vapor Detector Calibration. July-August, p. 388
- Basagill, William J.: Use of a Mobile Laboratory in Air Pollution Studies. January-February, p. 77
- Benson, Arthur L.: Clean Compressed Air. November-December, p. 644
- Berg, Byron A.: Another Tool for Hearing Conservation—An Improved Protector. March-April, p. 187
- Berg, Byron A.: Assessment of Physiological Stress During Climbing. November-December, p. 374
- Bianconi, W. O.: Reproducibility of Aerosol Photometer, Midget Impinger, and Membrane Filter Counts for Limestone and Coal Dusts. July-August, p. 362
- Boettner, Edward A.: Analysis of Air and Breath for Chlorinated Hydrocarbons by Infrared and Gas Chromatographic Techniques. May-June, p. 289
- Bogen, Emil: Effects of Ozone on Experimental Tuberculosis and on Natural Pulmonary Infections in Mice. May-June, p. 255
- Bokowski, D. L.: A Simple Analytical Method for Isolating Low-Level Alpha Activity of Americium-241 from Plutonium in a Routine Urinalysis Procedure. July-August, p. 413
- Boubel, Richard W.: Pressure-Volume Characteristics of Plastic Bags. May-June, p. 318
- Bozich, Thomas A.: Radiation Protection for a 10-Mev Linear Accelerator. May-June, p. 311
- Braverman, M. M.: A Study of the Effect of Motor Vehicle Exhaust on the Breathing Air of Apartment Houses. January-February, p. 84
- Brief, Richard S.: Nickel Carbonyl: Its Detection and Potential for Formation. January-February, p. 72
- Brinkley, Parke C.: Industry's Responsibility in the Toxicity Testing, Manufacture, Compounding, and Use of Economic Poisons. November-December, p. 611
- Brodsky, Allen: Determining Industrial Hygiene Requirements for Installations Using Radioactive Materials. May-June, p. 294
- Bromberger-Barnea, Baruch: Effects of Antimony on Myocardial Performance in Isolated and Intact Canine Hearts. July-August, p. 404
- Brown, Harold V.: The History of Industrial Hygiene: A Review with Special Reference to Silicosis. May-June, p. 212
- Carpentier, James: Work of the European Coal and Steel Community in Connection with Prevention of Occupational Hazards. November-December, p. 619
- Caruso, Frank S.: The Toxicity of Niobium Salts. July-August, p. 337
- Church, Franklin W.: Development of a Personal Monitoring Instrument for Noise. January-February, p. 59
- Clarke, John H.: The Design and Location of Building Inlets and Outlets to Minimize Wind Effect and Building Re-entry of Exhaust Fumes. May-June, p. 242
- Confer, Robert G.: Control of Mercury Vapor. November-December, p. 644
- Conveneole, Matteo: Work of the European Coal and Steel Community in Connection with Prevention of Occupational Hazards. November-December, p. 619
- Corn, Morton: Statistical Reliability of Particle Size Distributions Determined by Microscopic Techniques. January-February, p. 8
- Corn, Morton: Re-entrainment of Particles from a Plane Surface. July-August, p. 325
- Corn, Morton: The Standard Midget Impinger—Design Improvement and Miniaturization. November-December, p. 601
- Cornish, Herbert H.: Oral and Inhalation Toxicity of 2-Diethylaminoethanol. September-October, p. 479
- Cravitt, Samuel: Lightweight, High-Volume Electrostatic Precipitator Survey Sampler. September-October, p. 485
- Cumpston, A. G.: A Modified Diffusion Method for the Determination of Urinary Fluoride. September-October, p. 461
- Dallos, Frank C.: Analysis of Air and Breath for Chlorinated Hydrocarbons by Infrared and Gas Chromatographic Techniques. May-June, p. 289
- Davis, D. M.: Action Levels for Radiation Control at Oak Ridge National Laboratory. March-April, p. 165
- DeBrunner, M. R.: Phosgene in Air—Development of Improved Detection Procedures. September-October, p. 465
- Diamond, Philip: Air Pollution Evaluation of Titan II Test Firings. July-August, p. 419
- Diggs, D. R.: Survey of Lead in the Atmosphere of Three Urban Communities: A Summary. May-June, p. 270
- Di Giovanni, Hugo J.: Lightweight, High-Volume Electrostatic Precipitator Survey Sampler. September-October, p. 485
- Dinman, B. D.: A Modified Diffusion Method for the Determination of Urinary Fluoride. September-October, p. 461
- Diserens, Alton H.: A Five-Year Review of a Mercury Control Program. March-April, p. 117
- Downs, William L.: The Toxicity of Niobium Salts. July-August, p. 337
- Duffy, Thomas L.: Some Applications of Coulometry to Industrial Hygiene Analysis. September-October, p. 544
- Edwards, George H.: Dispersion Staining for Quartz on Membrane Filters. July-August, p. 442
- Edwards, George H.: Comparison of X-Ray Diffraction, Chemical (Phosphoric Acid), and Dispersion Staining Methods for the Determination of Quartz in Dust. September-October, p. 532
- Elkins, Hervey B.: Is the 24-Hour Urine Sample a Fallacy? September-October, p. 456
- Ettinger, Harry J.: Evaluation of Particle Sizing and Aerosol Sampling Techniques. January-February, p. 17
- Fassett, D. W.: Critique on the Concept of Audiometer Zero. January-February, p. 45
- Fay, J. W. J.: The Correlation of Dust Exposure with Progression of Radiological Pneumoconiosis in British Coal Miners. July-August, p. 347
- Fischhoff, Robert L.: The Relationship Between and the Importance of the Dimensions of Uranium Particles Dispersed in Air and the Excretion of Uranium in the Urine. January-February, p. 26
- Flyger, Hans: A Lithium Flame Photometer Test for Highly Efficient Filters. July-August, p. 409

- Fraser, David A.: An Innocuous Tracer Technique for Testing the Performance of Ventilation Systems. September-October, p. 490
- Gardner, George R.: Potassium Pallado Sulfite Method for Carbon Monoxide Detection. March-April, p. 97
- Goldman, Leon: Personnel Protection from High-Energy Lasers. November-December, p. 553
- Green, H. L.: 1965 Yant Award: Respiratory Protection Against Particulates—Problems Solved and Unsolved. May-June, p. 203
- Halitsky, James: Estimation of Stack Height Required to Limit Contamination of Building Air Intakes. March-April, p. 106
- Hall, Frank E.: Particle Settling Times in Ethyl Alcohol-Water Mixtures as Affected by Variables in Impinger Sampling. September-October, p. 537
- Hallam, Kenneth M.: Interference in Extraction of Lead by Dithizone. May-June, p. 323
- Harris, Robert L., Jr.: Particle Settling Times in Ethyl Alcohol-Water Mixtures as Affected by Variables in Impinger Sampling. September-October, p. 537
- Hayakawa, Ichiya: Short Storage Studies on the Effect of Temperature and Relative Humidity on the Viability of Airborne Bacteria. March-April, p. 150
- Hesselberg, H. E.: Survey of Lead in the Atmosphere of Three Urban Communities: A Summary. May-June, p. 270
- Higgins, George M.: Reactions Within the Lungs of Guinea Pigs to the Intratracheal Administration of Zinc Beryllium Silicate. May-June, p. 227
- High, Marvin D.: Field Experience in Measuring Hydrogen Sulfide. July-August, p. 366
- Hite, Mark: Contributions of Electron Microscopy to Occupational Health. July-August, p. 374
- Hochheiser, Seymour: Use of a Mobile Laboratory in Air Pollution Studies. January-February, p. 77
- Hodkinson, J. Raymond: The Effect of Particle Shape on Measures for the Size and Concentration of Suspended and Settled Particles. January-February, p. 64
- Hollenbeck, A. H.: Measuring the Environment for a Bronchial Asthma Study. September-October, p. 510
- Hoogstraaten, J.: Chronic Toxicity of Polyphenyl Mixtures. July-August, p. 380
- Hornby, Peter: Personnel Protection from High-Energy Lasers. November-December, p. 553
- Horstman, Sanford F.: Field Experience in Measuring Hydrogen Sulfide. July-August, p. 366
- Hounam, R. F.: The Cascade Centrifuge: A Device for Determining the Concentration and Size Distribution of Aerosols. March-April, p. 122
- Hoyt, Anson: Effects of Ozone on Experimental Tuberculosis and on Natural Pulmonary Infections in Mice. May-June, p. 255
- Hueper, W. C.: Blown Asphalt Not Carcinogenic. January-February, p. 95
- Jacobs, Morris B.: Photometric Determination of Mercury Vapor in Air of Mines and Plants. May-June, p. 261
- Jacobs, Roger: Photometric Determination of Mercury Vapor in Air of Mines and Plants. May-June, p. 261
- Johnson, Hamilton K.: Air Pollution Evaluation of Titan II Test Firings. July-August, p. 419
- Keenan, Robert G.: Spectrochemical Determination of Indium and Antimony in Biological Materials. May-June, p. 249
- Killens, Richard: Toxicity of Chronic Low Level Exposures to Toluene Diisocyanate in Animals. March-April, p. 143
- Kinser, Richard E.: Spectrochemical Determination of Indium and Antimony in Biological Materials. May-June, p. 249
- Knuth, Ronald H.: Performance of Defective High-Efficiency Filters. November-December, p. 593
- Kortsha, G. X.: Study of Impinger Flow Rates. July-August, p. 442
- Kryter, K. D.: Damage Risk Criterion and Contours Based on Permanent and Temporary Hearing Loss Data. January-February, p. 34
- Kubitz, K. A.: Phosgene in Air—Development of Improved Detection Procedures. September-October, p. 465
- Kupel, Richard E.: Spectrochemical Determination of Indium and Antimony in Biological Materials. May-June, p. 249
- Particle Settling Times in Ethyl Alcohol-Water Mixtures as Affected by Variables in Impinger Sampling. September-October, p. 537
- Quantitative Analysis of Polyvinylpyrrolidone in Atmosphere Samples and Biological Tissues. November-December, p. 558
- Larkin, Robert L.: Quantitative Analysis of Polyvinylpyrrolidone in Atmosphere Samples and Biological Tissues. November-December, p. 558
- Ledbetter, Joe O.: The Solubility of Airborne Radioactive Particles. March-April, p. 161
- Lester, David: The Inhalation Toxicity of Oxygen Difluoride. November-December, p. 562
- Levy, Barnett M.: Reactions Within the Lungs of Guinea Pigs to the Intratracheal Administration of Zinc Beryllium Silicate. May-June, p. 227
- Lilienfeld, Pedro: Lightweight, High-Volume Electrostatic Precipitator Survey Sampler. September-October, p. 485
- Linch, A. L.: Piperidine—A Hazardous Chemical. January-February, p. 95
- Phosgene in Air—Development of Improved Detection Procedures. September-October, p. 465
- The Standard Midget Impinger—Design Improvement and Miniaturization. November-December, p. 601
- Oxygen in Air Analysis—Evaluation of a Length of Stain Detector. November-December, p. 645
- Lincoln, T. A.: Action Levels in Medical Treatment of Radiation and Radioactivity Exposure. July-August, p. 400
- Lindeken, C. L.: Battery-Operated Staplex Sampler. May-June, p. 322
- Lippmann, Morton: Lightweight, High-Volume Electrostatic Precipitator Survey Sampler. September-October, p. 485
- Lord, S. S., Jr.: Phosgene in Air—Development of Improved Detection Procedures. September-October, p. 465
- Louw, C. W.: The Quantitative Determination of Benzo(a)pyrene in the Air of South African Cities. September-October, p. 520
- Ludwig, J. H.: Survey of Lead in the Atmosphere of Three Urban Communities: A Summary. May-June, p. 270
- MacEwen, James D.: Comparative Toxicity Studies at Reduced and Ambient Pressures. I. Acute Response. November-December, p. 568
- Maga, J. A.: Survey of Lead in the Atmosphere of Three Urban Communities: A Summary. May-June, p. 270
- McLouth, M. E.: Air Pollution Control at Cape Kennedy. March-April, p. 172

- McNerney, James M.: Comparative Toxicity Studies at Reduced and Ambient Pressures. I. Acute Response. November-December 568
- Mercer, T. T.: The Interpretation of Cascade Impactor Data. May-June, p. 236
- Michael, Paul L.: Noise in the News. November-December, p. 615
- Mill, R. A.: Measuring the Environment for a Bronchial Asthma Study. September-October, p. 510
- Mitchell, Kenneth K.: Continuous Outdoor Air Sampler. May-June, p. 285
- Moyer, R. A.: Hazards Identification Signs. May-June, p. 321
- Nagelschmidt, G.: The Study of Lung Dust in Pneumoconiosis. January-February, p. 1
- Nelson, Gary O.: A Dynamic Method for Mercury Vapor Detector Calibration. July-August, p. 388
- Nelson, K. W.: Lead in Urine by Atomic Absorption. July-August, p. 442
- Niewenhuis, Robert: Toxicity of Chronic Low Level Exposures to Toluene Diisocyanate in Animals. March-April, p. 143
- Ottoboni, Fred: Dynamics of Vapor-Air Mixtures. September-October, p. 445
- Paulus, H. J.: Measuring the Environment for a Bronchial Asthma Study. September-October, p. 510
- Pagnotto, Leonard D.: Urinary Dichlorophenol as an Index of Para-Dichlorobenzene Exposure. March-April, p. 137
Is the 24-Hour Urine Sample a Fallacy? September-October, p. 456
- Pelton, Patricia L.: Some Applications of Coulometry to Industrial Hygiene Analysis. September-October, p. 544
- Petkau, A.: Chronic Toxicity of Polyphenyl Mixtures. July-August, p. 380
- Pfeiffer, Albert: Rebound of Liquid Drops from a Solid Surface. November-December, p. 579
- Poon, Calvin P.: Short Storage Studies on the Effect of Temperature and Relative Humidity on the Viability of Airborne Bacteria. March-April, p. 150
- Posner, Samuel: Evaluation of Particle Sizing and Aerosol Sampling Techniques. January-February, p. 17
- Postman, Benjamin F.: Air Pollution Control in the City of New York. July-August, p. 394
- Reynolds, Barbara A.: A Colorimetric Method for the Determination of Hydrazine and Monomethylhydrazine in Blood. September-October, p. 527
- Riley, E. C.: Critique on the Concept of Audiometer Zero. January-February, p. 45
- Rosenbaum, H. C.: A Lithium Flame Photometer Test for Highly Efficient Filters. July-August, p. 409
- Sanderson, James T.: The Thermal Degradation of Protective Coatings—A Basic Study. Part I: Zinc-Rich Epoxy Primers. September-October, p. 449
- Scalf, Marion R.: The Solubility of Airborne Radioactive Particles. March-April, p. 161
- Scheel, Lester: Toxicity of Chronic Low Level Exposures to Toluene Diisocyanate in Animals. March-April, p. 143
Biological Changes Involving Metal Ion Shifts. November-December, p. 585
- Schneider, M.: The Maintenance of a Life Support Atmosphere in Sealed Systems. March-April, p. 177
- Schreiber, William J.: Safe Disposal of Contaminated Sacks. January-February, p. 95
- Scott, James K.: The Toxicity of Niobium Salts. July-August, p. 337
- Sherwood, R. J.: The Cascade Centripeter: A Device for Determining the Concentration and Size Distribution of Aerosols. March-April, p. 122
- Sie, S. T.: The Measurement of Phenol in Urine by Gas Chromatography as a Check on Benzene Exposure. January-February, p. 52
- Silverman, Leslie: Potassium Pallado Sulfite Method for Carbon Monoxide Detection. March-April, p. 97
- Skillen, Ralph G.: Effects of Ozone on Experimental Tuberculosis and on Natural Pulmonary Infections in Mice. May-June, p. 255
- Skillern, C. P.: Human Response to Measured Sound Pressure Levels from Ultrasonic Devices. March-April, p. 132
- Smith, C.: A Study of the Effect of Motor Vehicle Exhaust on the Breathing Air of Apartment Houses. January-February, p. 84
- Smith, C. S.: The Correlation of Dust Exposure with Progression of Radiological Pneumoconiosis in British Coal Miners. July-August, p. 347
- Steel, John: The Thermal Degradation of Protective Coatings—A Basic Study. Part I: Zinc-Rich Epoxy Primers. September-October, p. 449
- Stein, Felix: Re-entrainment of Particles from a Plane Surface. July-August, p. 325
- Stemmer, Klaus: Toxicity of Chronic Low Level Exposures to Toluene Diisocyanate in Animals. March-April, p. 143
- Stephens, Newman L.: Effects of Antimony on Myocardial Performance in Isolated and Intact Canine Hearts. July-August, p. 404
- Sterner, J. H.: Critique on the Concept of Audiometer Zero. January-February, p. 45
- Stevenson, J. L.: Carcinogenicity of Benz(a)phenanthrene Derivatives. September-October, p. 475
- Storlazzi, Mario: Use of a Mobile Laboratory in Air Pollution Studies. January-February, p. 77
- Sutton, W. L.: Critique on the Concept of Audiometer Zero. January-February, p. 45
- Taylor, R. D.: Battery-Operated Staplex Sampler. May-June, p. 322
- Tebbens, Bernard D.: Dynamics of Vapor-Air Mixtures. September-October, p. 445
- Terry, J. P.: Air Pollution Control at Cape Kennedy. March-April, p. 172
- Thienes, Clinton H.: Effects of Ozone on Experimental Tuberculosis and on Natural Pulmonary Infections in Mice. May-June, p. 255
- Thomas, Anthony A.: A Colorimetric Method for the Determination of Hydrazine and Monomethylhydrazine in Blood. September-October, p. 527
- Thomas, F. W.: Reproducibility of Aerosol Photometer, Midget Impinger, and Membrane Filter Counts for Limestone and Coal Dusts. July-August, p. 362
- Thompson, T. T.: Hazards Identification Signs. May-June, p. 321

Subject Index

A

accelerator, linear, 311
 adhesion forces, of particles, 325
 adjustment, for specific gravity, 456
 adsorbent, silica gel, 498
 aerodynamic, particle sizing, 64
 aerosols, evaluation of, 17
 —generator for, 593
 —measurement of, 64
 —photometer for, 363
 —size distribution, 122
 air, compressed, 644
 —detmg. oxygen in, 645
 —detmg. polyvinylpyrrolidone in, 558
 —flow through filters, 593
 air drag, on particles, 325
 air flow, testing of, 490
 air inlets, design of, 242
 air intake, design for, 106
 air outlets, design of, 242
 air pollution, asthma from, 510
 —benzopyrene in, 520
 —continuous sampler, 285
 —control of, 172
 —exhaust gases, 84
 —lead in, 270
 —of intake air, 106
 —at missile bases, 172
 —mobile laboratory, 77
 —from stack gases, 106
 —from Titan II, 419
 —from traffic, 84
 air-vapor, flow of, 445
 AISI tape sampler, for hydrogen sulfide, 366
 allyl glycidyl ether, Hygienic Guide, 89
 l-allyloxy-2,3-epoxypane, Hygienic Guide, 89
 alpha activity, in urine, 413
 alpha-furildioxime, detect nickel carbonyl, 72
 americium, in urine, 413
 aminopentipyrine, detmn. dichlorophenol, 137
 ammonia, coulometric method for, 544
 amyl acetate, Hygienic Guide, 199
 analysis, americium in urine, 413
 —ammonia, 464
 —asbestos, 544
 —benzopyrene, 520
 —carbon monoxide, 97
 —coulometric, 544
 —dichlorophenol in urine, 137
 —dust in lungs, 1
 —fluoride in urine, 461
 —hydrazine in blood, 527
 —hydrogen sulfide, 366
 —mercury in air, 261, 388
 —oxygen in air, 645
 —ozone, 544
 —phenol in urine, 52
 —phosgene, 465
 —plutonium in urine, 413
 —polyvinylpyrrolidone, 558
 antimony, detmn. of, 249
 —effect on heart, 404
 apartment houses, air pollution at, 84
 arsine, Hygienic Guide, 438
 asbestos, detmn. of, 464
 in lungs, 1
 ascorbic acid, niobium complex, 337
 ashine, of urine, 413
 asphalt, air pollution from, 394, 95
 asthma, from air pollution, 510
 atomic absorption, detmn. of lead, 442
 atomizer aerosol, 492
 for particulates, 409
 audiometer, ISO standard, 45
 reference levels, 45
 audiometric zero, 45
 awards, Yant Memorial, 203, 211
 aziridine, 86

B

bacteria, storage effect on, 150
 bags, plastic, 318
 banana oil, Hygienic Guide, 199
 benzanthracene, carcinogenicity, 475
 benzene, adsorption of, 502
 exposure test, 52
 in plastic bags, 321

benzene solubles, extraction of, 96
 benzophenanthrene, carcinogenicity, 475
 benzopyrene, in air pollution, 520
 in South Africa cities, 520
 beryllium, in tissue, 585
 beryllium oxide, by electron microscope, 374
 bioassay, of radiation exposure, 165
 biologic effects, of uranium, 26
 biphenyl, toxicity of, 380
 blood, lead in, 270
 hydrazine in, 527
 blood flow, effects of antimony, 404
 bromoethane, Hygienic Guide, 192
 British coal miners, dust diseases of, 347
 burns, laser beam, 553

C

calibration, audiometers, 45
 —cascade impactors, 236
 —impingers, 442
 —mercury detector, 388
 —midjet impinger, 601
 carbon dioxide, absorber for, 177
 carbon disulfide, effect of, 585
 carbon monoxide, detection of, 97
 Hygienic Guide, 431
 carbon tetrachloride, at reduced pressure, 568
 carcinogens, benzanthracene, 475
 benzophenanthrene, 475
 benzpyrene, 475
 cascade centripeter, design of, 122
 cascade impactor, characteristics of, 236
 cell, for coulometry, 544
 centrifugal, forces on particles, 325
 chloroform, Hygienic Guide, 636
 chlorodiphenyls, Hygienic Guide, 92
 chromatography, for polynuclear hydrocarbons, 520
 phenol in urine, 52
 Cincinnati, lead in air, 270
 climbing, stress of, 574
 Coal & Steel Community, 619
 coal, dust disease of, 1
 coal miners, lung disease of, 1
 coal mines, dust exposure in, 347
 communities, lead in air of, 270
 composition, of dust in lungs, 1
 compressed air, clean, 644
 contamination, of intake air, 106
 radioactive, 400
 radioactivity, 165
 contours, of noise risk, 34
 control, air pollution, 394
 —mercury vapor, 644
 —mercury hazards, 117
 —laser beams, 553
 —radiation hazard, 165
 corrosion, from air pollution, 172
 coulometry, methods of analysis, 544
 counting dust, errors in, 363
 cresol, in urine, 52
 criteria, air pollution, 394
 —hearing risk, 34
 —radioactivity safety, 294
 cyclohexanone, Hygienic Guide, 630
 cyclohexylketone, Hygienic Guide, 630

D

damage risk, noise, 34
 defective air filters, 593
 degradation, of paints, 449
 density, vapor-air, 445
 dental, laboratory hazards, 322
 design, air intake, 106
 —building ventilation, 242
 —cascade impactor, 236
 —improved impingers, 601
 —size sampler, 122
 —stack height, 106
 desorption, from silica gel, 498
 detector, mercury vapor, 388
 —nickel carbonyl, 72
 —oxygen in air, 645
 detector tube, for carbon monoxide, 97
 determination, see analysis
 p-dichlorobenzene, exposure index, 137

1,2-dichloroethane, Hygienic Guide, 435
 dichloromethane, Hygienic Guide, 633
 dichlorophenol, in urine, 137
 diet, niobium in, 337
 2-diethylaminoethanol, toxicity of, 479
 diffusion, detmn. of fluoride, 461
 diisocyanate, toxicity of, 145
 dimethylaminobenzaldehyde, for phosgene detmn., 465
 dimethylenimine, Hygienic Guide, 86
 diphenylamine, for phosgene detmn., 465
 dimethylenimine, Hygienic Guide, 86
 diphenylamine, for phosgene, detmn., 465
 dispersion staining, detmn. of quartz, 442, 532
 disposal, of contaminated sacks, 95
 distribution, of particle size, 8
 dithione, contamination of, 323
 drops, rebound of, 579
 dust, detmn. in lungs, 1
 —detmn. of, 212
 —disease from, 1
 —in coal mines, 347
 —particle size, 8
 —problems of, 203
 —sampling for, 363
 dust counting, errors, in, 363
 settling time, 537
 dust diseases, in coal miners, 347
 dynamics, of vapor-air, 445

E

ear protectors, from noise, 187
 economic poisons, safety of, 611
 eddy zone, near buildings, 242
 efficiency, air filters, 593
 —electrostatic sampler, 485
 —particle sizing, 17
 —sampling, 17
 electric charge, adhesion of particles, 325
 electrode, for coulometry, 544
 electron microscope, use of, 374
 electrostatic sampler, 485
 energy, of drops rebounding, 579
 1,2-epoxy-3-allyloxy propane, Hygienic Guide, 89
 epoxy primer, pyrolysis of, 449
 errors, in particle sizing, 8
 2-ethoxyethyl acetate, Hygienic Guide, 627
 ethyl bromide, Hygienic Guide, 192
 ethylene chloride, Hygienic Guide, 435
 ethylene glycol monoethylether acetate, Hygienic Guide, 627
 ethylenimine, Hygienic Guide, 86
 European Coal & Steel Community, 619
 excretion, in urine, 456
 of dichlorophenol, 137
 exhaust, motor vehicle, 84
 exhaust gases, discharge of, 242
 of missiles, 419
 extraction, apparatus, 96
 of benzene solubles, 96
 eye, laser injury, 553

F

fibrosis, from coal dust, 1
 filters, performance of, 593
 test of efficiency, 409
 flow, of gas mixtures, 445
 flow rates, of impingers, 442
 fluoride, detmn. in urine, 461
 fluoride dusts, Hygienic Guide, 426
 fluoride fume, Hygienic Guide, 426
 fluorine, Hygienic Guide, 624
 formaldehyde, Hygienic Guide, 189
 frequency polygon, for size, 8
 furancarbanol, Hygienic Guide, 196
 furfural, Hygienic Guide, 196
 furfuraldehyde, Hygienic Guide, 196

G

gas chromatography, phenol in urine, 52
 gases, sampling for, 285, 17, 593
 glycol dichloride, Hygienic Guide, 435
 goggles, for laser work, 553
 Gordon Conferences, 16
 government, activities of, 549

H

hair spray, polyvinylpyrrolidone in, 558
 hazards, identifying signs, 321
 —in dental laboratories, 322
 hearing, protection of, 187
 hearing loss, criterion of, 34
 hearts, effects of antimony, 404
 history, of industrial hygiene, 212
 hi-volume sampler, 485
 Houston, meeting at, 549
 humidity, effect on bacteria, 150
 hydrazine, in blood, 527
 hydrogen arsenide, Hygienic Guide, 438
 hydrogen sulfide, detmn. of, 366
 —tape sampler, 366

Hygienic Guides,

—allyl glycidyl ether, 89
 —amyl acetate, 199
 —arsine, 438
 —aziridine, 86
 —carbon monoxide, 431
 —chlorodiphenyls, 92
 —chloroform, 636
 —cyclohexanone, 630
 —cyclohexylketone, 630
 —1,2-dichloroethane, 435
 —dichloromethane, 633
 —dimethylenimine, 86
 —1,2-epoxy-3-allyloxy propane, 89
 —2-ethoxyethylacetate, 627
 —ethyl bromide, 192
 —ethylene chloride, 435
 —ethylene glycol monoethylether acetate, 627
 —ethylenimine, 86
 —fluoride (inorganic), 426
 —fluorine, 624
 —formaldehyde, 189
 —furfural, 196
 —ketohexamethylene, 630
 —methylene chloride, 633
 —methylene dichloride, 633
 —perchloroethylene, 640
 —pimelic ketone, 630
 —tetrachloroethylene, 640
 —trichloromethane, 636

I

impaction, of drops, 579
 impinger, flow rate of, 442
 —modified, 601
 incinerators, smoke control, 394
 indicator tube, for carbon monoxide, 97
 —pump for, 97
 indium, detmn. of, 249
 industrial hygiene, history of, 212
 infections, affected by ozone, 255
 ingestion, diethylaminoethanol, 479
 —niobium, 337
 —Santowax OM, 380
 inhalation, of diethylaminoethanol, 479
 of oxygen difluoride, 562
 injection, of antimony, 404
 of niobium, 337
 instrument, noise monitor, 59
 instrumentation, continuous sampler, 285
 —mercury detector, 261, 388
 intake, air for buildings, 106
 interference, in lead detmn., 323
 in phosgene detmn., 465
 iodine, Hygienic Guide, 423
 ISO audiometer standard, 45

K

ketohexamethylene, Hygienic Guide, 630
 kidney, effects of niobium, 337

L

laboratory, mobile, 77
 lasers, hazards of, 553
 lead, in blood, 270
 —detmn. by atomic absorption, 442
 —extraction of, 323
 —in urban air, 270
 —in urine, 270, 442, 456
 —traffic sources of, 270
 lead acetate, tape sampler with, 366

legislation, about noise, 615
 life support, systems for, 177
 limestone dust, counting of, 363
 linear accelerator, safety of, 311
 lithium hydroxide, test of filters, 409
 liver, detmn. antimony in, 249
 detmn. indium in, 380
 effects of Santowax on, 380
 Los Angeles, lead in air, 270
 lungs, dust in, 1
 —zinc beryllium silicate in, 227
 —zinc silicate in, 227
 —polyvinylpyrrolidone in, 558

M

membrane filters, quartz on, 442
 sampling with, 285
 use of, 363
 mercury, control program, 117
 detmn. in air, 261, 266
 exposures to, 266
 standard concentrations, 388
 vapor control, 644
 vapor detection, 388
 mercury vapor, in mines and plants, 266
 metals, in tissue, 385
 methanal, Hygienic Guide, 189
 methylene chloride, Hygienic Guide, 633
 methylhydrazine, in blood, 527
 methylene blue, method for H₂S, 366
 methylene dichloride, Hygienic Guide, 633
 microscope, electron, 374
 microwaves, hazards of, 105
 midget impingers, flow rate of, 442
 use of, 363
 improvement of, 601
 mines, dust exposure in, 347
 mercury in, 261, 266
 mining, in Europe, 619
 missiles, air pollution from, 172, 419
 mixtures, vapor-air, 445
 mobile laboratory, for air pollution, 77
 monitoring, air pollution, 77
 dusty air, 203
 noise, 59
 motor vehicle, exhaust gases, 84
 municipal agencies, services of, 549
 Mylar, bags for sampling, 321
 myocardial, effects of antimony, 404

N

narrow band, noise, 34
 New York, air pollution, 394
 nickel carbonyl, detection of, 72
 niobium, toxicity of, 337
 niobium pentachloride, toxicity of, 337
 nitrogen dioxide, adsorption of, 504
 at reduced pressure, 568
 noise, from ultrasonic devices, 132
 hearing loss, 34
 —hearing loss, 34
 —monitoring of, 59
 —personal protection from, 187
 —problems of, 615
 normal, metal in tissue, 585

O

Oak Ridge National Laboratory, 165
 occupational health, in Europe, 619
 optical, particle sizing, 645
 oxygen, analysis in air, 645
 —generator, 177
 oxygen difluoride, toxicity of, 562
 ozone, coulometric method, 344
 —effects on infection, 255
 —at reduced pressure, 568

P

paints, thermal degradation, 449
 pallado sulfite, method for CO, 97
 particle size, aerodynamic, 64
 —determination of, 17

—effect on counting, 363
 —of uranium, 26
 —related to shape, 64
 —reporting of, 8
 sampling for, 122
 particles, sizing of, 17, 64
 —solubility of, 161
 —uranium in air, 26
 particulates, adhesion of, 325
 —asthma from, 510
 —errors in determination, 363
 —filter tests, 409
 —protection from, 203
 —re-entrainment of, 325
 —sampling of, 363
 —settling time, 537
 —size separation of, 122
 pear oil, Hygienic Guide, 199
 pentyl acetate, Hygienic Guide, 199
 perchloroethylene, Hygienic Guide, 640
 performance, of air filters, 593
 —of ventilation, 490
 pesticides, development of, 611
 —see economic poisons
 phenol, detmn. in urine, 52
 phenol red, contamination of, 323
 Philadelphia, lead in air, 270
 phosgene, detection in air, 465
 phosphoric acid, detmn. of quartz, 532
 physiology, climbing stress, 574
 pimelic ketone, Hygienic Guide, 630
 piperidine, hazards of, 95
 plastic bags, for air sampling, 318, 321
 plutonium, in urine, 413
 pneumoconiosis, from coal dust, 1, 347
 polyvinylpyrrolidone, detmn. of, 558
 —in lungs, 558
 polynuclear hydrocarbons, 520
 pore size, of silica gel, 498
 potassium antimonate, effect on heart, 404
 potassium niobate, toxicity of, 337
 potassium pallado sulfite, method, 97
 power supply, sampler, 485
 pressure, effect on toxicity, 568
 primers, thermal degradation, 449
 propellants, air pollution from, 172
 protection, from laser beams, 553
 —from radioactivity, 294, 311
 protectors, hearing, 187
 protein, in air pollutants, 510
 pulmonary, effects of ozone, 255
 pulse, effect of climbing, 574
 pump, for indicator tube, 97
 PVP, detmn. of, 558
 pyrolysis, paints, 449

Q

quartz, detmn. of, 532
 —dispersion staining of, 442
 —by lectron microscope, 374

R

radiation, laser beam, 553
 —from linear accelerator, 311
 —safe levels of, 165
 Radiation Council, 33
 radioactive particles, solubility of, 161
 radioactivity, hazards of, 400
 —in skin wound, 400
 —medical treatment, 400
 —protection plan, 294, 311
 radiological health, training, 71
 radiology, of dust diseases, 347
 radionuclides, classes of, 294
 rebound, of drops, 579
 re-entry, of exhaust fume, 242
 reflection, of laser beam, 553
 respiration, effect of climbing, 574
 respirators, for dust, 203
 —protection by, 165, 203

S

safety, at linear accelerator, 311
 —of plastic bags, 318
 sampler, battery-operated, 322
 —continuous, 285

- electrostatic, 485
- for size distribution, 122
- midjet impinger, 601
- samplers, comparison of, 17
- sampling, by adsorption, 505
- of aerosols, 17
- benzopyrene, 520
- dust, 203
- for electron microscope, 374
- hydrogen sulfide, 366
- lead in air, 270
- nickel carbonyl, 72
- particulates, 17, 285, 363
- plastic bags for, 321
- radioactive particles, 161
- uranium in air, 26
- urine, 456
- Santowax OM, toxicity of, 380
- settling time, of particulates, 537
- shape, of particles, 64
- of rebounding drop, 579
- shift, of metal in tissue, 585
- signs, for hazards, 321
- silica gel, adsorbent, 498
- silicosis, history of, 212
- research, 1
- size, of dust in lungs, 1
- distribution of particles, 8
- effect of particles, 325
- size separation, of particles, 122
- sizing, of particles, 17
- skin, radioactivity in, 400
- smoke, control of, 394
- sodium antimonate, effect on heart, 404
- solubility, of radioactive particles, 161
- solvents, adsorption of, 498
- South Africa, air pollution in, 520
- space vehicle, life support in, 177
- specific gravity, of urine samples, 456
- spectrograph, detmn. of antimony, 249
- detmn. of indium, 249
- stack, design of, 106, 242
- stain detector, for oxygen, 645
- standards, and audiometry, 45
- dust exposures, 203, 347
- of noise, 615
- radiation safety, 165, 294, 400
- safety signs, 321
- uranium in air, 26
- weight to carry, 387
- see Hygienic Guides
- Staplex, sampler, 322
- statistics, of size distribution, 8
- sterile, compressed air, 644
- stress, of climbing, 574
- storage, effect on bacteria, 150
- Summary Report, 95, 321, 442, 644

T

- tape sampler, for hydrogen sulfide, 366
- temperature, effect on bacteria, 150
- terphenyl, toxicity of, 380
- testing, of air filters, 593
- of economic poisons, 611
- tetrachloroethylene, Hygienic Guide, 640
- thermal degradation, of paints, 449
- threshold shift, in hearing, 34
- tissue, metal content, 585
- Titan II, air pollution from, 419
- toluene, adsorption of, 503
- toluene diisocyanate, toxicity of, 143
- toxicity, 2-diethylaminoethanol, 479

- 2-diethylaminoethanol, 479
- of economic poisons, 611
- niobium, 337
- of oxygen difluoride, 562
- polyphenyl mixtures, 380
- at reduced pressure, 568
- Santowax OM, 380
- toluene diisocyanate, 143
- tracer, for ventilation flow, 490
- traffic, lead in air from, 270
- trichloroethylene, adsorption of, 504
- trichloromethane, Hygienic Guide, 636
- tuberculosis, ozone effect on, 255

U

- ultrasonics, human response to, 132
- ultraviolet, detmn. of mercury, 261
- detmn. of benzopyrene, 520
- uranium, in air, 26
- in urine, 26
- particles in air, 26
- urine, adjusted value, 456
- alpha activity in, 413
- americium in, 413
- detmn. fluoride, 461
- detmn. phenol, 52
- dichlorophenol in, 137
- 24-hour sample, 456
- lead in, 270
- mercury in, 117
- plutonium in, 413
- specific gravity, 456
- uranium in, 117

V

- vapor, mercury, 261, 644
- vapor-air, flow of, 445
- ventilation, history of, 212
- testing, 490
- viability, of bacteria, 150
- viscosity, in dust counting, 537

W

- weight, permissible to carry, 387
- wide band noise, 34
- wind effects, on air supply, 242

X

- X-ray diffraction, detmn. of quartz, 532
- X-rays, from accelerator, 311

Y

- Yant Memorial Award, 203, 211

Z

- zinc beryllium silicate, pulmonary effects, 227
- zinc primer, pyrolysis of, 449
- zinc silicate, pulmonary effects, 227

